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ABSTRACT

Twenty-two fifth grade students participated in a 3-week study to compare the learning transfer of historical fiction concepts of fifth-grade students receiving instruction in two different curricula. The two different modes of instruction were the basis for determining if there was a significant difference in the mean scores of the control and experimental group. The control group was taught historical fiction skills through the traditional language arts curriculum. The experimental group was taught historical fiction skills through the non-traditional social studies curriculum. The instrument used to assess students' transfer of learning of historical fiction in language arts and social studies was a teacher-made multiple choice and writing process test. At the end of the 3-week period a T test was used to analyze the mean scores. The results indicated that there was a significant difference in the achievement level between the control group and the experimental group. The transfer of learning of historical fiction concepts was seen at a much higher level in the experimental group, based on those students' higher scores on the writing process test. Appendixes describing the research instrument, lesson plans, statistical computations, and support material are included as well as a 39-item bibliography. (Author/DB)

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The Transfer of Learning of Historical Fiction In Language Arts and Social Studies of Fifth Year Students

by

Karen Lorane Beam

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Presented in Fulfillment of the Requirements for the Specialist Field Problem in the graduate program of education at Mercer University in Atlanta

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ABSTRACT

The Transfer of Learning of Historical Fiction
in Language Arts and Social Studies
of Fifth Year Students

by

Karen Lorane Beam

Purpose

The purpose of the study was to compare the learning transfer of historical fiction concepts of fifth grade students who received instruction in two different curricula. The two different modes of instruction were the bases for determining if there was a significant difference in the mean scores of the control and experimental group.

Methods and Procedures

Twenty-two fifth grade students participated in the three-week study. The control group was taught historical fiction skills through the traditional language arts curriculum. The experimental group was taught historical fiction skills through the non-traditional social studies curriculum. The instrument used to assess students' transfer of

learning of historical fiction in language arts and social studies was a teacher-made multiple choice and writing process test.

RESULTS

At the end of the three-week period a *t* test was used to analyze the mean scores. The results indicated that there was a significant difference in the achievement level of the control group and the experimental group.

Conclusions

Results of this study examined the learning transfer of historical fiction concepts of fifth grade students who received language arts instruction and students who received social studies instruction. The statistical evidence of this study indicated there is a significant difference between the two modes of instruction as related to the mean transfer of learning of historical fiction concepts in a language arts and social studies unit. The goal of learning transfer is problem solving. Educators are to teach for transfer and develop thinking skills across the curriculum.

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Section 1

INTRODUCTION AND PROBLEM STATEMENT

The individual achievements of thinking man are closely interrelated with accumulating knowledge and transmitting the results of learning from one generation to the next (Smith & Smith, 1966). Transfer of learning purports that performance on one task influences performance on a subsequent task (Ellis, 1965). In The Taming of the Shrew, Shakespeare (1594) despaired, "O! this learning, what a thing it is" (p. 329). Four centuries later mankind is similarly baffled, yet willingly seeking a solution to the mystery of man's mind in relation to learning (Smith, 1984).

The pedagogy of Socrates in the fifth century, B. C. utilized the teacher as a guide, coach, or director to help students recognize what was already in the mind. The teacher drew information from the student by means of skillfully directed questions in order to develop learning transfer (Bigge, 1982).

Johann Friedrich Herbart (1776-1841) developed the first modern systematic psychology of learning. The Herbartian theory of apperception is a process of new ideas relating themselves to the store of old mental states. Apperceptionists promote transfer by building up the great masses of facts. For apperceptionists, transfer is best when a good supply of facts and principles are stored. As a result, there is automatic retrieval and application to a given area of learning or living. In order to maximize transfer, the five steps should proceed: preparation, presentation, comparison, generalization, and application (Bigge, 1982).

The Stimulus-Response (S-R) bond theory of learning was developed in the early nineteen hundreds by Edward L. Thorndike. The basic thesis is that the theory of transfer that accompanies the S-R bond is transfer of identical elements. Transfer takes place from one learning situation to another only to the extent that there are identical aspects in the two.

(To play a piano and type on a typewriter requires similar eye-finger coordination) (Bigge, 1982).

The American philosopher and educational theorist, John Dewey, gives the twentieth century a concise statement and analysis of traditional and progressive education. For Dewey, there is no point in the philosophy of progressive education which is clearer than the importance of the learners' participation and formulating purposes in the learning process. An outstanding problem of education is modulation, or the movement from a social and human center to a more objective intellectual scheme of organization. When education is based in theory and practice upon experience, it represents the goal toward which education should move (Dewey, 1938).

Mankind lives from birth to death in a world which is what it is because of what has been done and transmitted from previous human activities. What is learned in the way of knowledge and skill in one situation becomes an instrument of understanding and dealing with situations which follow. Dewey remarks,

"How shall the young become acquainted with the past in such a way that the acquaintance is a potent agent in appreciation of the living present" (p. 23).

B. F. Skinner's operant conditioning theory of learning addresses the nature of transfer and its role in teaching and learning. In operant conditioning, learning transfer is an increased probability of responses. In other words, "one's repertoire of conditioned operants is the basis for transfer of one's learning" (Bigge, 1982, p. 267).

Teaching for trarsfer is a major component of metacognition in order to help students become conscious of their thinking processes. Research indicates that comprehension is not only the accumulation of information, but the connecting of new knowledge to prior knowledge (Solomon, 1989). Much new learning is probably influenced in many ways by previous learning (Ellis, 1965).

Learning transfer may follow three treks. Transfer of learning may be a positive transfer, a task may facilitate a second task. Negative transfer occurs when a task disrupts or inhibits the second

task. Zero transfer occurs as a result of no effect on one task to another (Ellis, 1965).

Gagne' (1974) defines learning transfer as "the recall of what has been learned and its application to new and different contexts" (p. 40). Retrieval of what is learned does not always occur within the same context that surrounds the original learning.

Learning transfer to promote new learning of a subject is vertical transfer. A lesson may include questions or problems which seem to probe for the presence of prerequisite capabilities in the students' working memory. Transfer of learning to other fields of study is lateral transfer. When the learner confronts a new situation, the memory search and retrieval must sort what has been previously learned and apply it to the new task (Gagne', 1974).

Strategies for retrieval are dependent on how people learn. Tables, graphs, diagrams, and pictures help students use their own cognitive strategies or schema for retrieval (Gagne', 1974). Schema theory suggests that the readers' understanding of a text relies on their previous experiences and these

experiences interact with information in the text (Smith & Smith, 1986).

Problem solving tasks promote transfer of learning. Class discussions help in problem solving and promote transfer of learning. When a group of students share a common set of information and skills, the formulation of ideas provides feedback as a method of instruction (Gagne', 1974).

Unfortunately, students do not transfer knowledge to problem solving contexts in a new situation. The achievement of transfer is difficult. First, the skill or knowledge is not initially learned. Second, the skill or knowledge is learned and assimilated, but its use is not a part of the instruction. Finally, knowledge may be too specific or local, rather than general, with crossover, integrating, or subject complementing (Perkins & Salomon, 1988).

A misconception of learning transfer is that transfer will happen. This "Bo Peep" theory of transfer refers to the phrase, "let them alone and they'll come home, wagging their tails behind them." The assumption is that a skill or content learned will

spill over to other contexts in school and life in general. Two different mechanisms of transfer are low road and high road. Low road transfer reflects the automatic triggering of well-practiced routines. High road transfer requires abstraction and application of a skill from one context to another (Perkins & Salomon, 1988).

The major goal of what education hopes to achieve is transfer of basic skills. Once a "data base" of knowledge is established, application to other school subjects and life outside of school follows. Transfer plays a key role in the teaching of thinking skills (Perkins & Salomon, 1988).

The way a learner processes information affects what is learned and remembered. Theorists claim that learners who process information deeply and elaboratively should recall more than those who do not. Elaboration is an exercise in applying information to one's life or personalizing it. Deep processing is a more academic exercise in verbal classification and categorical comparison. Contention is that elaboration involves more holistic processing

while deep processing involves more analytic information processing. During deep processing the learner attends to the parts rather than the whole. The analytic ability in a learner uses processing strategy to categorize and classify information. During elaboration, a learner probably uses holistic thinking to see how new information relates to prior knowledge (Alexandrini, Langstaff, & Wittrock, 1984).

Studies by Gagne' and Paradise (1961) suggest that there is a learning hierarchy. The learning of a new skill by transfer may take place in the context of instruction. Students are more likely to become engaged in learning when new content connects to existing understandings (Wooster, 1989). When learning occurs without instruction, this is problem solving (Winkles, 1986).

Some elements of knowledge cannot be learned or mastered without prior learning (Winkles, 1986). Louis Armstrong, trumpet instrumentalist and jazz musician, made this remark about jazz, "Unless you know what it is, I ain't never going to be able to explain it to you" (Smith, 1986, p. 146).

Learning is an adjunct to memory, and memory is a piece of consciousness (Smith, 1984). Because of the discrepancy about the brain's ability to learn, researchers an educators continually explore the roles of curriculum, methodology, and instruction (Crossett, 1983).

The researcher sought the best method to benefit the students in the transfer of learning of historical fiction concepts in language arts instruction and social studies instruction. The teaching methods included reading literature orally, choral reading, lectures, listening, discussion, and the writing process.

Statement of the Problem

The purpose of the study was to compare the learning transfer of historical fiction concepts of fifth grade students who received language arts instruction with students who received social studies instruction. The following question comprised the problem of this study: Is there a significant difference in transfer of learning for students who are taught historical fiction in a fifth grade language arts class and those taught in a social studies class?

Definitions

Central to understanding this study were several specific terms which were defined as follows:

Transfer of learning purports that performance on one task influences performance on a subsequent or relevant task (Ellis, 1965).

Historical fiction is a special kind of realistic fiction combining fictional details with the facts about real and important people from history or events from history (Early, 1983).

Prior knowledge incorporates pre-existing concepts in the act of comprehending (Zintz & Maggart, 1984).

Comprehension is the use of prior knowledge to create new knowledge (Zintz & Maggart, 1984).

Cognitive style is a person's individual approach to problem solving (McGinnis & Smith, 1982).

Cognition is the mental process by which knowledge is acquired (McGinnis & Smith, 1982).

Metacognition is reflection on our own thinking processes (Weinstein, 1987).

Critical thinking is the application of intellectual skills in order to find a solution or form a conclusion (Hudgins, Risemmy, Ebel, & Edelman, 1989).

Assumptions

The following assumptions were made at the beginning of the study:

1. The lessons, as planned, would be suitable for the ability and maturity levels of the children.

2. The language arts group and the social studies group would be equivalent in ability.

3. The instrument used by the investigator for the purpose of assessing students' achievement would be a valid and reliable measure of achievement.

Section 2

RELATED RESEARCH REVIEW

Research on learning transfer is usually aimed at teaching methods and determining the effects of practice of one task upon another. In order to assist educators, the issue to study is why transfer occurs and determine the variables that influence transfer (Ellis, 1965).

David Ausubel, educational theorist, addresses the goal of learning subject matter. He advocates the improvement of presentational methods of teaching (lectures and reading). Ausubel is also one of the few educational theorists to simultaneously address learning, teaching, and curriculum. His theory of verbal learning deals with: curriculum content (how knowledge is organized); learning (mind processing of new information); and instruction (teachers' application of curriculum and learning transfer to students). Ausubel promotes the need for many types of learning processes because each fosters different educational objectives (Joyce & Weil, 1980).

Experience shows that transfer of learning does not always occur when the principle is understood and applied. Cognitive field theorists believe the best circumstances for learning transfer is when meanings are applied to learning and living, when there is a desire to solve new problems or approach new situations, and when the learner can discover relationships personally and can apply this learning to other tasks. Teachers must teach for transfer and help students understand relationships, principles, and generalizations (Bigge, 1982).

Ellis' principles of transfer include: 1) Overall task similarity occurs when training conditions are similar and transfer of learning is greatest. 2) Stimulus similarity occurs with a positive transfer and the learner makes the same response to new or similar stimuli. 3) Learning to learn is the cumulative practice of a series of related problems. 4) Insight develops as a result of practice in solving similar or related problems.

5) Understanding and transfer are greater if the rules or principles are appropriate to solving the problem (Zintz & Maggart, 1984).

A contributor to the understanding of transfer of learning is the study of metacognition. Reflecting on one's own thinking processes is metacognition. It refers to one's knowledge about cognitive processes and the ability to control these processes (Weinstein, 1987). According to Baker and Brown (1984) a "metacognition environment" encourages training of skills with an awareness of the utility of the skills (Weaver, 1987). Transfer of learning is the student's ability to independently apply strategies to different situations. Through instruction students develop an ability to transfer and become independent learners. Instruction shifts the responsibility of strategies from the teacher to the student (Carr & Ogle, 1987).

Critical thinking uses skills of inspecting, organizing, and weighing information in order to support a conclusion. "Critical thinking is a complex of intellectual skills that are consciously,

deliberately, and consistently applied by a thinker when he or she is confronted by a body of data from which a conclusion must be derived" (Hudgins, Riesenmy, Ebel, & Edelman, 1989).

Learning strategies are necessary to produce a cognitively active learner. In order to be a cognitively active learner a knowledge base must exist. This content or prior knowledge helps in problem solving and decision making. Students must have a knowledge base and also need to know about one's own thinking processes (Weinstein, 1987).

Teaching strategies to foster transfer of learning requires implementing a metacurriculum within content areas. Two cognitive processes used by students are an algoric and heuristic approach (Weinstein, 1987).

An algoric process has one correct implementation. The student tries to match established standards, such as a cooking lesson. A heuristic process has set guidelines which are modified and adapted for each question. Problem

solving is a heuristic process. Students cannot be taught the exact way to solve problems; general guidelines can help the search for solutions (Weinstein, 1987).

Instructional teaching of an algorithm is to present many examples as a model. On the other hand, heuristics require that the learner reflect upon a method, practice it, and receive corrective feedback (Weinstein, 1987).

Robert Gagne' wrote, "the essential task of the teacher is to arrange the conditions of the learner's environment so that the processes of learning will be activated, supported, enhanced, and maintained" (Hart, 1983, p. 152).

Studies Concerning Language Arts

Writing and reading are language arts activities which share similarities in the ways they are learned and the influence each has on the other. Educators believe that reading can increase the knowledge individuals have to write about. Writing can clarify

subject matter and enhance additional reading. The two linguistic processes complement each other. The thought processes mirror one another (Fitzgerald, 1989).

Critical reading refers to the criticism of one's thinking while reading. The reader compares the writers' text to their goals, beliefs, and expectations. Critical readers do not change the printed word, but they have the option to change their understanding of it (Fitzgerald, 1989).

Prior knowledge is the core of reading comprehension. There is the assumption that younger readers do not comprehend as well as older readers because of limited knowledge, or readers comprehend with distortion. The quantity and quality of children's prior knowledge are factors in comprehending new information (Lipson, 1984).

Problems in reading comprehension can be attributed to the readers who have inaccurate notions, or who use their knowledge inappropriately. The problem is not the lack of prior knowledge, but the failure to resolve conflicts between existing

knowledge and new information. "Both poor and average readers seemed better able to learn new information when they did not have wrong ideas cluttering up their knowledge structures" (Lipson, 1983, p. 762).

Students should monitor their reading for inaccuracies, inconsistencies, or errors (Lipson, 1984). The concept of comprehension monitoring describes the process of evaluating and taking needed action to improve one's comprehension while reading. Reading instruction in the classroom rarely involves students in evaluating their own understanding of the text. Focus on the awareness of knowledge is no longer the main concern; equally important is the control of that understanding (Mier, 1984).

Advocates of monitoring training suggest that thinking skills can be improved through training. Teachers must be aware of their students' abilities and maturity and adapt procedures to these differences. Comprehension monitoring does not develop automatically through maturity, but is highly dependent on knowledge and expertise (Mier, 1984).

Student involvement is an important element in questioning. The question/answer/feedback format is standard methodology in our schools. Farrar (1984) concludes that teachers ask questions not only to seek information, but as a basis of analyzing and controlling students. Anthropologist Esther Good looks at questions as being information or command. Questions provide a vehicle for the child to sort out and separate command functions. The child gradually realizes the informational question as a tool for securing information, not just for demonstration purposes (Farrar, 1984).

Teachers need to develop a clear understanding of why comprehension questions are asked and serve as a link to learning transfer. "Assessment, cognitive processing, and augmenting learning are all better viewed as aspects of socialization in ... preparing young people to function well in their culture" (Farrar, 1984, p. 465).

Critical thinking advocates the use of strategies to help learners think critically. Creative writing experiences that ask the student to go beyond the text

are strategies that help thinkers activate and retrieve stored knowledge, access it, and modify it (Hirsh, 1988).

One of the best ways to broaden students' thinking and reasoning skills is through stories. Reading aloud to the students helps them understand that stories require imagination. This helps expand their knowledge base as tools to solve problems and develop patterns of thinking in cause and effect relationships (Hirsh, 1988). Reading aesthetically fuses the cognitive and affective elements and the reader has a "lives-through" experience (Hirsh, 1988).

Research suggests that students learn history in myths and folktales, biographies, and historical fiction. Children can transport themselves into other worlds. Critical thinking abilities are related to a historical analogy and recognizing fact and fiction (Hirsh, 1988).

Studies Concerning Social Studies

A primary goal of social studies education is to help students develop the ability to think. The formulation of thinking skills and processes focus on generic thinking abilities such as comparing, ordering, classifying, inferring, the breakdown of a problem into parts, and thinking about thinking (Fair & Kachaturoff, 1988).

The extent to which generic abilities transfer into content areas is uncertain. When a thinking program is added to the school curriculum, educators often leave the regular curriculum unchanged (Fair & Kachaturoff, 1988).

California's new framework for history-social studies education reaches geographically out through space and historically back in time. The theme of history is prevalent throughout the new curriculum. By studying what it must have been like to have lived in another era emphasizes the importance of applying ethical understanding and civic virtue to create a good society (Alexander & Crabtree, 1988).

Each school year devotes itself to a historical period for an in-depth study. This chronological time frame allows for teachers to plan and integrate literature, art, and music. This year to year diversion from United States history to world history provides a global perspective (Alexander & Crabtree, 1988).

The new curriculum of history-social studies education is an integrative approach which establishes human events geographically and historically in relation to economics, political science, and sociology. It relies on learning transfer in its chronological probe as students relate the controversy and experiences of the past as solutions and guidance for the present and future (Alexander & Crabtree, 1988).

Educational futurists proclaim active learning; i.e., students must participate in learning endeavors. In the future, learning will be centered around ideas and problems, not fragmented subject areas. The educational futurists call for a transdisciplinary based curriculum which is a vertical, thematic

curricula integrating many disciplines around a central theme. Because of the global interdependent nature of the world, it is necessary for society to draw solutions from knowledge in a variety of areas in order to foresee other problems. The emphasis should shift from what is learned, to how to learn (from content to process) (Benjamin, 1989).

Teaching that focuses on critical thinking skills can be utilized in the content of social studies for the elementary school child. Two strategies include word associates and defending point of view. These strategies distinguish relevant from irrelevant material, reviewing and applying content material already studied, and generalizing the commonality that serves as the basis for relevance. This strategy reviews social studies content and serves as the focus for transfer to any content area (McFarland, 1985).

Instruction in literature is a good model in teaching history. Imaginary entry into the past helps children speculate what action they would have taken, and link the past to the present and imagine the future (Levstik, 1989).

Significance of the Problem

There is the assumption that what is taught in the classroom will transfer to new situations. There must be some transfer or every new learning situation would start anew. The issue is not if transfer occurs, but the conditions under which transfer occurs (Ellis, 1972).

Sternberg's study (1985) reports that teaching critical thinking and its application to living appears to have little relation to one another. The problems of thinking in adulthood do not correspond to the problems in critical thinking teaching programs. Problems which teach critical thinking often deal with an invented problem. Unless programs, which teach critical thinking, reflect the realities of everyday problem solving and decision making, students will not be able to face a complex world. "The only way to insure the transfer of training from thinking skills programs to everyday lives is to teach for that transfer ..." (Sternberg, 1985, p. 280).

When students are questioned and the response requires to process data or originate ideas, students

are engaging in cognitive functioning at a higher level. This higher order thinking requires students to take cognitive tasks and to work with ideas in a mental exercise (Wassermann, 1987).

Instruction can teach for transfer. Teaching can mediate the processes of connection and provoke students for generalizations. Teachers are aware of questioning strategies. Persistence and planning is integral to the teaching for transfer. Teaching for transfer is a key component to critical thinking and problem solving (Perkins & Salomon, 1988).

As students learn new content, they need to know they will be challenged to use it as raw material for thinking. To solve problems, children need strategies, or systematic ways of thinking. Strategic thinking depends on metacognition. Unless students are conscious of their own thought processes, they cannot take charge of what goes on in their minds (Feldman, 1986). Student mastery of critical thinking requires continued instruction in a critical thinking skill over a period of years. It grows and develops gradually as students have repeated experiences using

skills in a variety of contexts (Beyer, 1985).

The goal of transfer of learning should be to develop in students the desire for inquiry. When curriculums are organized around questioning of content, the boundaries are borderless. The criteria of answers serve as fuel for transfer. The student's knowledge becomes a means to the end, learning (Wiggins, 1989).

The significance of the present study lies in its contribution to the field of education concerned with transfer of learning of a historical fiction objective in language art and social studies.

Section 3

METHODOLOGY

The purpose of this section is to describe the general stages of the experiment. This section provides a discussion of the following elements of the study: (a) statement of hypothesis, (b) sampling technique, (c) instrumentation, (d) experimental design, (e) procedure, and (f) statistical analysis.

Statement of the Hypothesis

The following hypothesis was tested at the .05 level of significance: There is a significant difference in the mean transfer of learning of historical fiction concepts of fifth grade students who are instructed in language arts and students who are instructed in social studies.

Sampling Technique

The sample consisted of 22 fifth grade students. The racial majority of the school is 97.9 white. The racial majority of the school's seven fifth grade classes is 99.9% white; however, the sample's racial majority is 100% white. The

socio-economic background of the parents is professional, middle-to-high class income level. The experimental group contained seven boys and four girls. The control group contained five boys and six girls.

The school's fifth grade students had been placed in seven different classrooms based upon reading tests administered in the fourth grade. One class, or one-seventh of the fifth grade population, served as the sample of the study. The sample of 22 fifth grade students was assigned to two groups, control and experimental, by a flip of a coin. The two groups were randomly designated experimental or control by a flip of a coin.

Instrumentation

The instrument used to assess students' transfer of learning of historical fiction in language arts and social studies was a teacher-made multiple choice and writing process test. Context was produced from the teacher's edition of English (Silver Burdett & Ginn, 1988, pp. 310-321) and The United States: Its History

and Neighbors (Harcourt, Brace, & Jovanovich, 1988, pp. 242-291), and Blazing Trails (Harcourt, Brace, & Jovanovich, 1983, pp. T442-T445; Workbook Lesson 42, pp. 132-134).

Levels of comprehension questions based on taxonomies of Bloom, Sanders, and Barrett included: literal questions and statements (listing, defining, recalling, naming, locating); interpretive and relating relevant information, generalizing, or concluding; critical or evaluative questioning and statements (thinking beyond the information presented, extending divergent approaches to a problem) (Zintz & Maggart, 1984).

The purpose of multiple choice questions was to determine if the student could distinguish the meaning of historic fiction from other literary styles. In order to write about a specific time in history, students were asked the dates of the colonial American era. Characterization was tested by listing five people from the colonial period and five people from other periods or eras.

The writing process test was based on the Georgia

Basic Skills Writing Test from the Georgia Criterion referenced test. The writing measure rated the essay on five domains of effective writing:

Content and Organization - The writer has an established central idea. The ideas are clearly developed and evidence a sense of order and completeness. The weight of this domain was three times the score point.

Style - The writer has established a personality or individuality. Descriptive language, concrete images, and varied sentence types and vocabulary made the tone of the paper appropriate for the topic, audience, and purpose. The weight of this domain was two times the score point.

Sentence Formation - The writer has formed complete sentences with appropriate end punctuation. The weight of this domain was one times the score point.

Usage - The writer has used Standard American English, using correct subject-verb agreement and clear pronoun references. The weight of this domain was one times the score point.

Mechanics - The writer has employed rules of

Standard American English including capitalization, internal punctuation, formatting, and spelling. The weight of this domain was one times the score point.

The writing process test was based on score points times the weight of each domain:

Score Point 1: The writing was Inadequate. Very few components were demonstrated.

Score Point 2: The writing was Minimal. Some of the components were demonstrated.

Score Point 3: The writing was Good. Many of the components were demonstrated successfully.

Score Point 4: The writing was Very Good. Most of the components were demonstrated consistently.

The maximum score point was 32; the lowest score point was eight. Conversion of score points to a percentage was based on Georgia's Quality Basic Education, zero to one hundred percent (0 to 100%) (See Table 1):

0- 69= U

70- 73= D

74- 82= C

83- 91= B

92-100= A

Table 1

Conversion of Score Points

to Percentages

Points	%	Points	%
8	69	18	85
8.5	70	19	86
9	71	20	87
9.5	72	21	88
10	73	22	89
10.5	74	23	90
11	75	24	91
11.5	76	25	92
12	77	26	93
12.5	78	27	94
13	79	28	95
13.5	80	28.5	96
14	81	29	97
15	82	30	98
16	83	31	99
17	84	32	100

The multiple choice part of the test was scored on a percentage. Its weight was one-third of the test. The writing process portion of the test was scored by points and converted to percentages; its weight was two-thirds of the test. The two parts were averaged based on the weights.

The writing process and multiple choice test consisted of two parts. Part I, given independently from Part II, consisted of the writing process portion; Part II consisted of three multiple choice questions requiring seven answers (see instrument in Appendix A). The test instrument was reviewed and analyzed by experts deemed valid in content.

Experimental Design

This study incorporated a Randomized Control Group Posttest Only Design. The paradigm for this design is presented in Table 2.

Table 2

Randomized Control Group Posttest Only Design

Assignment	Group	N	Independent Variable	Posttest
R	E	11	X	Y
R	C	11	●	Y

R: Random assignment to groups

E: Experimental group - 11 students

C: Control group - 11 students

X: Received historical fiction instruction through social studies curriculum

●: Received historical fiction instruction through language arts curriculum

N: Number of students in each group

Y: Posttest to measure learning transfer

The two groups were not told they were in an experimental study. The experimental group was taught the concept of an historical fiction objective through social studies. The control group was taught the concept of an historical fiction objective through a language arts curriculum.

Procedure

Control Group

The control group studied a historical fiction objective identifying historical events, real people, and fictional details in historical fiction literature. The control group was instructed the skills through the traditional language arts curriculum; i.e., basal readers and skills workbook, and the English textbook lessons. Each text was used as basic instructional tools. Secondary instructional tools were collections of short stories and historical fiction novels or books. Students read a variety of historical fiction stories based on colonial America and the American Revolution. The teacher read books to the group. Students were responsible for reading

stories assigned, defining relevant vocabulary, and answering comprehension questions. A teacher-made writing process test and multiple choice test was administered to assess the concepts of historical fiction during the colonial American Revolutionary War period.

During the course of the present study, the control group read from the basal reader independent of class discussion. Students answered workbook skills independent of teacher in-put. Students were given an assignment entitled, Truth or Fiction (See Appendix A). The objective of this assignment was to list the facts in a historical fiction story in relation to fictitious details in the theme, characters, setting, and events. The students did not want to answer basal questions, workbook skills, or fill out the form on Truth or Fiction.

Two historical fiction films were shown to help the students distinguish fact from fiction in history: "Johnny Tremain" and "Yankee Doodle Cricket." The students were interested in the theme of "Johnny Tremain"; they were amused at the

characters in "Yankee Doodle Cricket." The children viewed these films as entertainment. There was no indication of learning transfer to social studies content or the colonial period and Revolutionary War.

Despite the similarity in the mean score of the control group to the experimental group, the control's group's attitude toward the lesson was one of obligation and disinterest.

Experimental Group

The experimental group was instructed in the skills of a historical fiction objective through the non-traditional social studies curriculum. The social studies text served as the basic instructional tool; the material was read independently and discussed.

The following films were viewed as a basis for historical fiction content: "George Washington," "The American Revolution," "The Midnight Ride of Paul Revere," "The Declaration of Independence by the Colonies," "The Battle of Yorktown," "The Boston Tea Party," "Johnny Tremain," and "Yankee Doodle Cricket." The films averaged eight to 26 minutes in length.

When students were called upon to generalize about events such as the Boston Tea Party, the role of Paul Revere, or the Sons of Liberty, assumptions and details to factual events helped the students distinguish between fact and opinion. This served as a foundation to the understanding historical fiction.

Although the films depicted factual events, the students were very aware that the dialogue was made-up in order to meet the need of telling a story in history. The two films viewed by the Control Group were also viewed by the Experimental Group ("Johnny Tremain" and "Yankee Doodle Cricket"). The group discussion of the two films indicated a clear understanding of the events during colonial America's Revolutionary War period. The students could distinguish fact from fiction as portrayed in an event in history in its relation to making up details in order to create a story.

The students were given an assignment to write a historical fiction story about Benjamin Franklin. Students were allowed to use their social studies book. The worksheet was designed in the Writing

Process format; i.e., prewriting, writing, revision, and publishing (See Appendix A).

Types of questions served to stimulate and develop social studies discussions. Three important phases of discussion included: the initiation phase indicated the purpose of the discussion; the development phase allowed elaboration and comparison of ideas; and the synthesis was the concluding phase (Cornbleth, 1977).

Six types of questions were useful in discussions. Questions calling for creative expression and judgment provided focus and stimulated interest and thought. Personal belief/experience questions and comprehension questions called for inferencing and hypothesizing. These were effective in initiating discussions. Comprehension, creative expression, and judgment questions were useful in synthesis. In stimulating and maintaining student participation in productive dialogue, techniques or strategies in moderating, pacing, and reacting to student responses were followed (Cornbleth, 1977).

A teacher-made writing process test and

multiple choice test was administered to determine the concepts of historical fiction during the colonial American Revolutionary War period. The test is presented in Appendix A.

Statistical Analysis Procedure

In order to evaluate the hypothesis formulated for this experimental study, data were collected and analyzed by a *t* test to determine if there was a significant difference between the means. The hypothesis was tested at the predetermined $\alpha = .05$ level of significance.

SECTION 4

RESULTS AND CONCLUSIONS

This study was concerned with the learning transfer of historical fiction concepts of fifth grade students. The study compared mean scores of the control and the experimental groups of a language arts and social studies historical fiction unit. This section presents a discussion, limitations, implications, and conclusions concerning the experimental study.

Results

The hypothesis formulated for this study and stated in the null form was as follows: There is a significant difference in the mean transfer of learning of historical fiction concepts of fifth grade students who are instructed in language arts and students who are instructed in social studies. The toss of a fair coin determined the control group and the experimental group. The toss of a fair coin determined the control group would be taught the concepts of historical fiction in language arts. The toss of a fair coin determined the experimental group would be taught the concepts of historical fiction in

social studies. At the end of a three week period, both groups were given a posttest. The results were analyzed by the students' t test. These results are presented in Table 3.

Table 3

t Test Results of Writing Process Posttest

Group	N	M	S	t
E	11	92.45	8.23	
				-2.18
C	11	79.45	17.99	

E: Experimental Group

C: Control Group

N: Number of students

M: Mean of scores

S: Standard deviation

t: t-score

As indicated in Table 3, the t ratio for the difference between the scores was -2.18. This statistical result was based on a two-tailed test with a .05 level of significance and 22 degrees of freedom. A t score of -1.96 or 1.96 was needed to establish a significant difference between the means (see Appendix B for statistical calculations). Therefore, the null hypothesis was rejected. It was concluded that there is a significant difference in the achievement level of the two groups.

Conclusions

The results of this study rejects the statement of the null hypothesis. Therefore, there is a significant difference in the mean transfer of learning of historical fiction concepts of fifth grade students instructed in language arts and students instructed in social studies.

Language arts and social studies curricula provide two modes of instruction for teaching historical fiction concepts. Although each mode of instruction is a basis for teaching historical fiction objectives, the study indicated a significant

difference in the overall performance of students receiving language arts instruction and students receiving social studies instruction on a teacher-made, writing process post assessment.

Discussion

The researcher was aware of the curriculum content of social studies and language arts of the sample class of fifth grade students. Having taught the concepts of historical fiction in a language arts lesson integrated with social studies, the researcher became aware of the importance of social studies content as a complement to historical fiction literature.

The language arts curriculum has been the traditional mode of instruction for teaching the objectives and concepts of historical fiction. Research studies presented in Section 2 indicated the importance of learning transfer in language arts. Story reading promotes a student's imagination and helps develop their critical thinking processes for problem solving. Historical analogy and the recognition of fact and fiction are critical thinking

abilities which promote problem solving (Hirsh, 1988).

The social studies curriculum has been designed to develop thinking skills. When historical events serve as a link to the present and future, students' critical thinking and reasoning skills process the relationship, transfer takes place, and there is problem solving (Fair & Kachaturoff, 1988).

On the other hand, Sternberg (1985) reported that the teaching of critical thinking will not transfer to problem solving because of invented problems and unrealistic scenarios Teaching for transfer will insure thinking skills will transfer to reality.

Limitations

The validity of this study was limited by several factors: The sample size of each group was small. There were only 11 children in each group. These sample groups were not representative of the fifth-grade population of the district. The racial majority of the sample class was 100% Caucasian. Therefore, the results of the study may not be applicable to the general population. The three week

period was not conducive to a thorough study of historical fiction. The two groups were not in the room simultaneously. The movement of each group from the physical classroom to another setting was time consuming. This movement may have affected classroom management which also consumed valuable instructional time. The teacher-designed testing instrument had no reported reliability or validity coefficients.

Implications

This study examined the learning transfer of historical fiction concepts of fifth grade students who received language arts instruction and students who received social studies instruction. The statistical evidence of this study indicated there is a significant difference between the two modes of instruction as related to the mean transfer of learning of historical fiction concepts in a language arts and social studies unit. Statistical results of this study reported a discernible difference in the means of the two treatment groups. Although statistical results do not measure interest and motivation, the control language arts group

approached the basal reading lesson and English text skills with disinterest coupled with an obligation to complete the assigrment.

The small class size of 11 students created a classroom management problem. The students did not like the intimacy and personal instruction in this small group setting. Because two key classroom leaders were not in this group, the students were reticent in responding to questions and participating in discussions.

The experimental social studies group approached the lesson with interest. Having been taught social studies content provided a data base or prior knowledge in order to formulate a theme for historical fiction writing. The small class size of 11 students had a positive influence. The students felt special in this small, intimate environment. Participation in discussions and answering questions was experienced by everyone in the group. This group wanted to continue social studies in this setting for the remainder of the year.

Both instructional modes produced learning. It is possible that further research with a larger population would provide significant information regarding the transfer of learning of historical fiction concepts through the non-traditional social studies curriculum and its positive contributions to the language arts curriculum. Further research into the transfer of learning would provide educators with another key to the mystery of how students learn, process information, and solve problems.

The goal of learning transfer is problem solving. The objectives of the educator are to teach for transfer and develop thinking and processing skills. The global, interdependent society's problems and mistakes requires a mecca of solutions from its citizenry.

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APPENDIX A

INSTRUMENT

HISTORICAL FICTION TEST

Part I.

Write a historical fiction story about the life of a person in colonial America. Be sure to tell the most important information about the person, answering the questions who, what, when, and where. You will be graded on Content & Organization, Style, Sentence Formation, Usage, and Mechanics.

HISTORICAL FICTION TEST

Part II.

Multiple Choice: Check the correct answer beside the letter.

1. The definition of historical fiction... :

____ a). is about make believe people and events.

____ b). is about real people and actual events about their life.

____ c). combines fictional details with facts about real people in history.

____ d). combines fictional details with facts about made-up or imagined characters and events in history.

2. Colonial America dates are:

____ a). 1941-1946

____ b). 18th century

____ c). 1492-1496

____ d). 19th century

3. Check the names of colonial Americans:

_____ Martin Luther King	_____ Thomas Jefferson
_____ George Washington	_____ Ben Franklin
_____ Ponce de Leon	_____ Magellan
_____ John Paul Jones	_____ Paul Revere
_____ Christopher Columbus	_____ Ronald Reagan

APPENDIX B

LESSON PLANS

Social Studies

The American Revolution- Unit 5

Chapters 10 and 11

Hirsh, S. A. (Ed.). (1988). The United States: Its History and Neighbors, Orlando: Harcourt, Brace, & Jovanovich, (pp. 242-291)

Objectives

Week #1:

1. The students will give one reason for the French and Indian War.
2. The students will describe the outcome of the French and Indian War.
3. To tell what the Stamp Act was and describe its impact on the colonists.
4. To tell who the Sons of Liberty were and their purpose.
5. To tell the cause and result of the Boston Tea Party.

Week #2

1. Explain the purpose of the First Continental Congress.
2. Tell the purpose of Paul Revere's ride.
3. Distinguish between Patriots and Loyalists.

Week #3

1. Explain the purpose of the Second Continental Congress.
2. Explain the purpose of the Declaration of Independence
3. Identify Nathanael Green, John Paul Jones, George Rogers Clark, and Francis Marion as important military leaders in the Revolutionary War.
4. Identify the women and their role in the Revolutionary War.
5. Identify factors which contributed to an American victory.

English Text Unit 8 Lesson 9

Toth, M., Ragno, N., Gray, B., & Livingston, M. (1988). English. Morristown, NJ: Silver Burdett & Ginn, pp. 310-321.

Three Week-Objectives:

1. To read and enjoy a historical fiction story.
2. To recognize the conclusion drawn by the main characters in solving the story problem.
3. To respond to the story by thinking, speaking, listening, and writing.
   a. Thinking: To classify elements of stories as truth or fiction, to investigate topics, to choose relevant details, to invent characters, to synthesize fact and fiction.
   b. Speaking & Listening: To participate in discussions, to present oral summaries.
   c. Writing: To write summaries, character descriptions, story plans, and historical fiction stories.

Reading Unit 20

Early, H. (1983). Blazing Trails. Orlando: Harcourt, Brace & Jovanovich. pp. 442T-445T; Workbook Lesson 42, pp. 132-134.

Three-Week Objectives:

1. To identify historical fiction
2. To identify historical events and real people in historical fiction.
3. To identify fictional details in historical fiction.

Basal Reading Selections:

Hamilton Hill: September 18, 1784 by Jean Fritz.

The Temper of Tempe Wick by Patricia Lee Gauch

The Little Riders by Margaretha Shemin

TRUTH OR FICTION

Directions: After reading a historical fiction story, list details of the story in the appropriate columns.

Title of story: _____

Author: _____

TRUTH	FICTION
Theme:	Theme:
Characters:	Characters:
Setting:	Setting:
Events:	Events:

Resources

Films & Video Cassettes:

"American Revolution" LCA, 1972.

"The Battle of Yorktown" EBE, 1968.

"The Boston Tea Party" EBE, 1972.

"The Declaration of Independence by the Colonies" EBE, 1956.

"George Washington" EBE, 1980.

"Johnny Tremain" Disney, 1966.

"The Midnight Ride of Paul Revere" EBE, 1957.

"Yankee Doodle Cricket" Xerox, 1976.

Books:

Avi. The Fighting Ground. J. B. Lippencott, 1984.

Benchley, Nathaniel. Sam the Minuteman. Harper & Row, 1969.

Bernbaum. Louis. Red Dawn at Lexington. Houghton Mifflin, 1986.

Collier, James L., & Christopher Collier. My Brother Sam Is Dead, Four Winds, 1974.

Fritz, Jean B.:

Can't You Make Them Behave, King George? (1981)

And Then What Happened, Paul Revere? (1973)

George Washington's Breakfast. (1969)

What's the Big Idea, Ben Franklin? (1976)

Why Don't You Get a Horse, Sam Adams? (1974)

Where Was Patrick Henry on the 29th of May? (1975)

Will You Sign Here, John Hancock? (1976)

Publisher: Coward, McCann, & Geoghegan

Filmstrip:

Fritz, Jean. "Six Revolutionary War Figures".

Weston Woods, 1983.

APPENDIX C

STATISTICAL COMPUTATIONS

TEST SCORES

Experimental Group		Control Group	
Subject Number	Posttest Scores	Subject Number	Posttest Scores
1	92	1	63
2	99	2	82
3	80	3	62
4	89	4	53
5	99	5	93
6	99	6	93
7	99	7	91
8	89	8	53
9	96	9	95
10	99	10	100
11	76	11	89

Standard Deviation Formula

Control Group "c"	Experimental Group "e"
$\Sigma Xc = 874$	$\Sigma Xe = 1017$
$\Sigma \bar{X}c = 79.45$	$\Sigma \bar{X}e = 92.45$
$Nc = 11$	$Ne = 11$

$$S = \sqrt{\frac{\Sigma(x-\bar{x})^2}{N-1}}$$

$= \sqrt{\frac{3236.7275}{10}}$	$= \sqrt{\frac{676.72611}{10}}$
$= \sqrt{323.67275}$	$= \sqrt{676.72611}$
$= 17.990907$	$= 8.2263364$
$= 17.99$	$= 8.23$

Statistical Analysis

Statement of Hypothesis: $H_o: \mu_c - \mu_e = 0$

$H_1: \mu_c - \mu_e \neq 0$

Level of Significance = .05

Criteria for rejection Ho: $t > 1.960$ or

$t < 1.960$

Degrees of Freedom = N + N -2 =

df = 11 +11 -2 = 20

$\bar{X}c = 79.45$	$\bar{X}e = 92.45$
$Nc = 11$	$Ne = 11$
$Sc = 17.99$	$Se = 8.23$

$$t = \frac{(\bar{X}c - \bar{X}e) - (\mu c - \mu e)}{\sqrt{\frac{(Nc-1)Sc^2 + (Ne-1)Se^2}{N1 + N2 - 2} \cdot \left(\frac{1}{Nc} + \frac{1}{Ne}\right)}}$$

$$t = \frac{(79.45)-(92.45)-0}{\sqrt{\frac{(11-1)(17.99)^2 + (11-1)(8.23)^2}{11+11-2} \cdot \left(\frac{1}{11} + \frac{1}{11}\right)}}$$

$$t = \frac{-13.}{\sqrt{\frac{(10)(323.6401) + (10)(67.7329)}{20} \cdot (.090909+.090909)}}$$

$$t = \frac{-13.}{\sqrt{\frac{3236.401 + 677.329}{20} \cdot (181818)}}$$

$$t = \frac{-13.}{\sqrt{\frac{3913.73}{20} \cdot (.181818)}}$$

$$t = \frac{-13.0}{\sqrt{195.6865 \cdot (.181818)}}$$

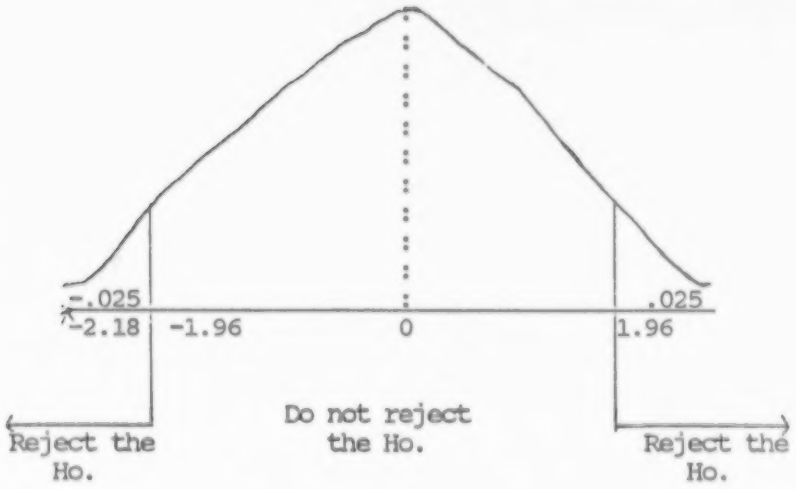
$$t = \frac{-13.}{13.988799 \cdot (.4264012)}$$

$$t = \frac{13.0}{5.9648406}$$

$$t = -2.1794379$$

$$t = -2.18$$

Criteria for Rejection of the Null



Conclusion

Reject the null hypothesis; therefore, there is a significant difference in the achievement levels of the two groups.

APPENDIX D

SUPPORTIVE MATERIAL

This instrument was designed to assess students' transfer of learning of historical fiction in language arts and social studies. The instrument was designed to reflect Benjamin Bloom's taxonomy of educational objectives. The materials for instruction and testing were produced from the teacher's editions of English by Silver Burdett & Ginn, 1988, The United States: Its History and Neighbors by Harcourt, Brace, and Jovanovich, 1988, and Blazing Trails by Harcourt, Brace, and Jovanovich, 1988. The test was reviewed and deemed valid in content by two experts in their respective fields of language arts and social studies. There are no reliability or validity coefficients associated with this test instrument.